

IN THE CLAIMS:

Please amend the claims as follows:

1-4. (Cancelled)

5. (Currently Amended) A plasma resistant seal comprising

a plasma seal made entirely of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a ~~rubber-like elastic material~~ plasma resistant FKM rubber containing no mineral component and serving as a main seal,

said plasma seal being made entirely of a non-filler type of polyterafluoroethylene-polytetrafluoroethylene and said packing being an O-ring,

a plasma seal installation groove shallower than a depth of a packing installation groove provided in an installation member, and being next to a plasma irradiation side of said packing installation groove;

the packing being attached to said packing installation groove; and

the plasma seal having an arch cross sectional shape with a concave surface facing a bottom surface of said plasma seal installation groove, being attached to said plasma seal installation groove in a compressed state so that the packing is

prevented from protruding into a gap extending from a plasma irradiation direction.

6. (Currently Amended) A plasma resistant seal comprising

a plasma seal made entirely of a material provided with a plasma resisting performance; the plasma seal being provided in a plasma irradiating side of a packing made of a ~~rubber-like elastic material~~ plasma resistant FKM rubber containing no mineral component and serving as a main seal,

said plasma seal being made entirely of a non-filler type of polyterafluoroethylene-polytetrafluoroethylene and said packing being an O-ring,

the packing being attached to a packing installation groove provided in an installation member, and the plasma seal being attached to a plasma irradiation side of the installation groove in a compressed state;

the plasma seal having an arch cross sectional shape with a concave surface engaging the packing and having a convex surface engaging the plasma irradiation side of the packing installation groove, and

the convex and concave surfaces of the plasma seal being arranged along a direction generally orthogonal to a plasma irradiation direction so that the packing is prevented from protruding into a gap extending from the plasma irradiation direction.

7-12. (Cancelled)

13. (Currently Amended) An apparatus for manufacturing a semiconductor device by irradiating plasma using a plasma resistant seal, said plasma resistant seal comprising a plasma seal made entirely of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a ~~rubber-like elastic material~~ plasma resistant FKM rubber containing no mineral component and serving as a main seal,

said plasma seal being made entirely of a non-filler type of polytetrafluoroethylene ~~polytetrafluoroethylene~~ and said packing being an O-ring,

a plasma seal installation groove shallower than a depth of a packing installation groove provided in an installation member, and being next to a plasma irradiation side of said packing installation groove;

the packing being attached to said packing installation groove; and

the plasma seal having an arch cross sectional shape with a concave surface facing a bottom surface of said plasma seal installation groove, being attached to said plasma seal installation groove in a compressed state so that the packing is prevented from protruding into a gap extending from a plasma irradiation direction.

14. (Currently Amended) An apparatus for manufacturing a semiconductor device by irradiating plasma with using a plasma resistant seal, said plasma resistant seal comprising a plasma seal made entirely of a material provided with a plasma resisting performance, the plasma seal being provided in a plasma irradiating side of a packing made of a ~~rubber-like elastic material~~ plasma resistant FKM rubber containing no mineral component and serving as a main seal,

said plasma seal being made entirely of a non-filler type of polyterafluoroethylene-polytetrafluoroethylene and said packing being an O-ring,

the packing being attached to a packing installation groove provided in an installation member, and the plasma seal being attached to a plasma irradiation side of a same installation groove in a compressed state,

the plasma seal having an arch cross sectional shape with a concave surface engaging the packing and a convex surface engaging the plasma irradiation side of the packing installation groove, and

the convex and concave surfaces of the plasma seal being arranged along a direction generally orthogonal to a plasma irradiation direction so that the packing is prevented from protruding into a gap extending from the plasma irradiation direction.

15-18. (Cancelled)